



Object position detector.

Patent number: EP0574213
Publication date: 1993-12-15
Inventor: MILLER ROBERT J (US); BISSET STEPHEN J (US)
Applicant: SYNAPTICS INC (US)
Classification:
- **International:** G06K11/16
- **European:** G06F3/033D2G, G06F3/033Z4S2
Application number: EP19930304403 19930607
Priority number(s): US19920895934 19920608

Also published as:

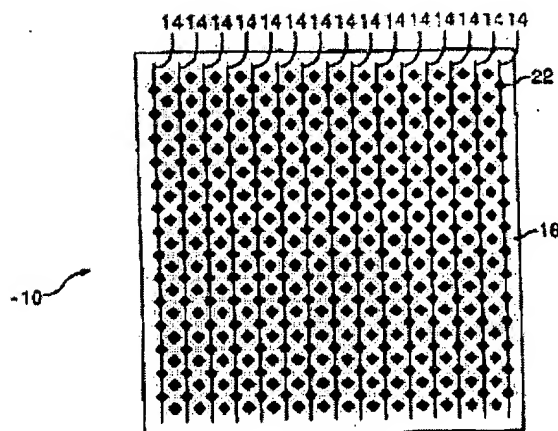
 EP0574213 (B1)

Cited documents:

 US4550221
 FR2662528
 US4736191

Abstract of EP0574213

A proximity sensor system includes a sensor matrix array having a characteristic capacitance between horizontal and vertical conductors connected to sensor pads. The capacitance changes as a function of the proximity of an object or objects to the sensor matrix. The change in capacitance of each node in both the X and Y directions of the matrix due to the approach of an object is converted to a set of voltages in the X and Y directions. These voltages are processed by analog circuitry to develop electrical signals representative of the centroid of the profile of the object, i.e., its position in the X and Y dimensions. The profile of position may also be integrated to provide Z-axis (pressure) information.

**FIG. 1a**